Remote Sensing and the Success of the next IPCC Assessment

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Analyses based on remote sensing data have played a prominent role in all of the IPCC assessments to date. Satellite derived temperature, rainfall, gravity anomalies, surface albedo, and vegetation characteristics underlie key conclusions and make a strong contribution to the reports' widely acknowledged authoritativeness. For the IPCC Fifth Assessment, scheduled for release in 2013-2014, there is the potential for analyses based on remote sensing to be even more prominent, more central to the key messages, and more widespread. Capitalizing on this potential should be a top NASA priority over the next few years. Most of the potentially important data sets will require dedicated effort, and in many cases new funding, to insure that the analysis is extended to the level of policy relevant products and that time series are as long as possible. Key products will likely continue to address atmospheric properties and ice volume, while also providing increased information on a wide range of land and ocean processes. The IPCC Fifth Assessment Report will be one of the premier for analyses based on satellites from the EOS era.